

**METHOD OF SCREENING AGENTS FOR THE TREATMENT AND PREVENTION  
OF CANCER AND CACHEXIA AND THE NEW USE OF SPECIFIC AGENTS FOR  
THE TREATMENT AND PREVENTION OF CANCER AND CACHEXIA**

**Abstract**

A method for screening agents to determine possible use as treatment and prevention drugs is provided. More specifically, cells, living organisms, mammals, or tissue are treated with the compound or agent of interest and then measured for transient activation of stress-response pathways. Activation of any of the genes or signaling molecules associated with a stress-response pathway is then determined. A transient activation of any of the genes within these pathways of transcription activation indicates the agent is a candidate for a drug, or a source of a drug for the treatment and prevention of cachexia, other wasting disorders, cancer, atherosclerosis, heart disease, autoimmune disease, chronic inflammatory disease, alcoholic hepatitis, non-alcoholic hepatitis, rheumatoid arthritis, osteoarthritis, type II diabetes, insulin insensitivity, Parkinson's disease, Alzheimer's disease, and any other condition caused or mediated by chronic oxygen radical damage or by chronic chemical toxicities. Methods of treatment and uses of specific agents are also provided.